



(10) **Patent No.:** US 6,570,876 B1  
(45) **Date of Patent:** May 27, 2003

- |           |   |   |         |                     |          |
|-----------|---|---|---------|---------------------|----------|
| 5,268,900 | A | * | 12/1993 | Hluchyj et al. .... | 370/94.1 |
| 6,067,301 | A | * | 5/2000  | Aatresh .....       | 370/418  |
| 6,104,700 | A | * | 8/2000  | Haddock et al. .... | 370/235  |

FOREIGN PATENT DOCUMENTS

JP 7135512 5/1995

\* cited by examiner

*Primary Examiner*—Hassan Kizou

**Assistant Examiner—Joe Logsdon**

(74) Attorney, Agent, or Firm—Antonelli, Terry, Stout & Kraus, LLP

(57) **ABSTRACT**

A packet switch for switching variable length packets, wherein each of output port interfaces includes a buffer memory for storing transmission packets, a transmission priority controller for classifying, based on a predetermined algorithm, transmission packets passed from a packet switching unit into a plurality of queue groups to which individual bandwidths are assigned respectively, and queuing said transmission packets in said buffer memory so as to form a plurality of queues according to transmission priority in each of said queue groups, and a packet read-out controller for reading out said transmission packets from each of said queue groups in the buffer memory according to the order of transmission priority of the packets while guaranteeing the bandwidth assigned to the queue group.

**6 Claims, 7 Drawing Sheets**

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,231,633 A \* 7/1993 Hluchyj et al. .... 370/94.1

